

Amendments to the Claims:

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68. (Currently Amended) An induction device formed with a core having a region of reduced permeability in a selected portion thereof comprising:

a distributed air gap material disposed in the selected portion of the core; and

a flexible high-voltage winding wound on the core and being configured to operate in an inclusive range of above 34 kV through a system voltage of a power network, ~~said high-voltage winding being flexible including~~

a current-carrying conductor formed of a plurality insulated strands and a plurality of uninsulated strands,

an inner layer having semiconducting properties surrounding and being in electrical contact with said current-carrying conductor,

a solid insulating layer surrounding and contacting the inner layer, and

an outer layer having semiconducting properties surrounding and contacting the solid insulating layer.

69. (Currently Amended) The induction device according to claim 68, wherein:
said core has opposed free ends forming an interface with said air gap material;

said air gap material has a magnetic permeability value;

said core has a magnetic permeability value;

said permeability value of said air gap material is less than said magnetic permeability value of said opposing free ends;

said permeability value of said opposing free ends is less than said magnetic permeability value of said core; and

a transition ~~translation~~ zone formed by differences in magnetic permeability values of said air gap, said core, said air gap material and said opposing free ends.

70. (Cancelled)

71. (Previously Presented) The induction device according to claim 68, wherein said distributed air gap, comprises:

an air gap insert for providing reluctance in said air gap;
said air gap insert is a multi-component structure; and
a transition zone in said air gap wherein said multicomponent structure of said air gap insert has more than one value of magnetic permeability.

72. (Previously Presented) The induction device according to claim 71, wherein:
said multi-component structure has a central portion and end portions.

73. (Previously Presented) The induction device according to claim 72, wherein:
said central portion has a permeability value;
said end portions have a permeability value;
said core has a permeability value;
said permeability value of said central portion is less than the permeability value of said end portions;
said permeability value of said end portion is less than said permeability value of said core; and
said difference of permeability values forms said transition zone.

74. (Cancelled)

75. (Cancelled)

76. (Previously Presented) The induction device according to claim 73, wherein:
said core is comprised of at least one of:

- a) a magnetic wire,
- b) a ribbon of magnetic material, and
- c) a magnetic powder metallurgy material.

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114. (Cancelled)

115. (Currently Amended) An induction device formed with a core having a region of reduced permeability in a selected portion thereof comprising:

a distributed air gap material disposed in the selected portion of the core; and

a flexible high-voltage winding wound on the core and being configured to operate in an inclusive range of above 34 kV through a system voltage of a power network, said high-voltage winding being flexible including

a current-carrying conductor comprising a plurality insulated strands and a plurality of uninsulated strands,

an inner layer having semiconducting properties surrounding and being in electrical contact with said current-carrying conductor,

a solid insulating layer surrounding and contacting the inner layer, and

an outer layer having semiconducting properties surrounding and contacting the solid insulating layer.